

Reliable SATA Storage Engineered for Enterprise Demands

PASCARI SA52



Sequential Read

Up to 530 MB/s

Sequential Write

Up to 500 MB/s

Random Read

Up to 98K IOPS

Random Write

Up to 35K IOPS

Interface

SATA III

Capacity

Up to 7.68TB

Form Factor

2.5"

DWPD

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Product Features

- Power Loss Protection (PLP)
- TCG Opal 2.0 Support
- AES-XTS 256-bit Encryption
- End-to-End Data Path Protection

Solutions – SA52P

Form Factor 2.5"						
Capacity ⁽¹⁾	240GB	480GB	960GB	1.92TB	3.84TB	7.68TB
Interface	SATA III					
NAND Flash	3D TLC					
Performance ^(2,3,4)						
Sequential Read (MB/s)	530 (Est.)	530	530	530	530	530
Sequential Write (MB/s)	350 (Est.)	500	500	500	500	500
4K Random Read (IOPS)	88K (Est.)	94K	98K	98K	98K	98K
4K Random Write (IOPS)	12K (Est.)	24K	30K	35K	30K	19K
Read Latency (Typ., μ s)	TBD	110	110	110	110	115
Write Latency (Typ., μ s)	TBD	45	45	45	45	50
Power Consumption ⁽⁵⁾						
Active (W)	TBD	2.7	2.8	2.9	3.2	3.3
Idle (W)	TBD	1.3	1.4	1.5	1.7	1.7
Endurance/Reliability						
DWPD ⁽⁶⁾	1	1	1	1	1	1
UBER	< 1 sector per 10^{17} bits read					
MTBF (million hours)	2.0	2.0	2.0	2.0	2.0	2.0
Limited Warranty (years)	5	5	5	5	5	5
Temperature						
Operating Temp. (°C)	0 - 70	0 - 70	0 - 70	0 - 70	0 - 70	0 - 70
Non-Operating Temp. (°C)	-40 - 85	-40 - 85	-40 - 85	-40 - 85	-40 - 85	-40 - 85
Physical Dimension						
Length (mm)	100.00	100.00	100.00	100.00	100.00	100.00
Width (mm)	69.85	69.85	69.85	69.85	69.85	69.85
Height (mm)	7.00	7.00	7.00	7.00	7.00	7.00
Weight (g)	56 (Est.)	57	59	59	63	63
Part Number						
Non-SED FW	S1201K05240GP 02256G00	S1201K05480GP 02512G00	S1201K05960GP 021T0200	S1201K051T92P 022T0400	S1201K053T84P 024T0900	S1201K077T68P 024T0900
SED FW	S1201K05240GP 22256G00	S1201K05480GP 22512G00	S1201K05960GP 221T0200	S1201K051T92P 222T0400	S1201K053T84P 224T0900	S1201K077T68P 224T0900

(1) 1 GB = 10^9 bytes.

(2) Sequential Performance is based on FIO on Linux, 128KB data size, with QD=32, 1 job.

(3) Random Performance is based on FIO on Linux, 4KB data size, QD=32, 1 job.

(4) Latency is measured with random workloads based on FIO on Linux, 4KB data size, QD=1, 1 job.

(5) Power consumption (average RMS) is measured during the sequential read/write and random read/write operations performed by iometer.

(6) The results of DWPD are obtained in compliance with JESD219A standards.



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